31/31 GN03011

We claim,

- 1. An apparatus for evaluating the triboelectrical properties of at least two samples, comprising:
 - a grounded means (1) for holding a material in sheet form comprising a support provided on at least one surface thereof with at least two samples each in at least one predefined region thereof;
 - a charging means (4) for tribocharging said at least two samples; and
 - a means (7) for measuring an electrical property of said at least two samples.
- 2. An apparatus according to claim 1, wherein said at least two samples comprise at least one test sample and at least one internal reference sample.
- 3. An apparatus according to claim 1 or 2, wherein said grounded means for holding said support provided on at least one surface thereof with said at least two samples is a rotatable drum (1).
- An apparatus according to claims 1 to 3, comprising a means (11) for performing a calculation on said measured electrical property.
- 5. An apparatus according to claim 4, wherein said means for performing a calculation on said measured electrical property is a computer (11).
- 6. An apparatus according to claims 1 to 5, wherein said apparatus comprises:
 - a grounded rotatable drum (1) for holding the support in sheet form;
 - a charging roller (4), consisting of or covered with a triboelectric reference material;
 - a measuring probe (7) connected to a voltmeter (8) for measuring electrostatic potentials;
 - a computer (11) for handling outgoing and incoming data.

32/32 GN03011

- 7. An apparatus according to claim 5 or 6, wherein a software (12) of a computer (11) controls the rotation speed of said rotatable drum (1) and the linear translation speed of said measuring means (7) for measuring said electrical property across said support in sheet form.
- 8. An apparatus according to any of claims 1 to 7, comprising a means for a post-treatment on said at least two samples.
- 9. An apparatus according to claim 8, wherein said means for a post-treatment is chosen from a printing means, a drying means, a moisturising means, a thermal treatment means, a UV-curing means, or combinations thereof.
- 10. A method for evaluating the triboelectrical properties of an array of samples, said method comprising the following steps:
 - (a) providing on a support in sheet form an array of samples each in a predefined region;
 - (b) tribocharging said array of samples; and
 - (c) measuring sequentially an electrical property of a sample in said array of tribocharged samples.
- 11. A method according to claim 10, said method comprising a step (d) of subjecting said samples on said support in sheet form to a post-treatment step chosen from a printing step, a drying step, a moisturising step, a cooling step, a thermal treatment, a UV-curing step, or combinations thereof.
- 12. A method according to claims 10 or 11, wherein statistical calculations are performed on the measured electrical property of said tribocharged samples in said array, wherein

33/33 GN03011

each different test sample of said tribocharged samples is present in at least two different columns and rows.